

STIC Search Report

STIC Database Tracking Number: 156

TO: Margaret Einsmann

Location: REM 9A49

Art Unit: 1751 June 28, 2005

Case Serial Number: 10/647827

From: Kathleen Fuller Location: EIC 1700

REMSEN 4B28

Phone: 571/272-2505

Kathleen.Fuller@uspto.gov

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EINSMANN 10/647827 6/28/05 Page 1

=> file reg

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 JUN 2005 HIGHEST RN 853049-67-9 DICTIONARY FILE UPDATES: 27 JUN 2005 HIGHEST RN 853049-67-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> file hcapl

FILE 'HCAPLUS' ENTERED AT 12:20:10 ON 28 JUN 2005

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FILE COVERS 1907 - 28 Jun 2005 VOL 143 ISS 1 FILE LAST UPDATED: 27 Jun 2005 (20050627/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

EINSMANN 10/647827 6/28/05 Page 2 => d que STR L1OH 17 G6 0 15 Ak 🗸 G2 o∼^Ak s~ Ak ,11 } @23 24 @25 26 @27 28 @5 NH~Cb~G1 0 16 18 19 20 33 41 0 0 OH@ $0 \sim C \sim N \sim Ak$ C = C34 @35 36 37 @42 43 6 structures from this query $N \sim C \sim O \sim G3$ N-\(^G4\(^G5\) @29 30 31 32 @38 39 40 NO2 @53 N 46,050 48 47 Page 1-A 51 to.
applicant 52 Page 1-B VAR G1=23/25/27/29/35/38 VAR G2=O/N/S VAR G3=AK/CB VAR G4=C/S VAR G5=AK/CB VAR G6=42/45VPA 52-1/2/5/6 U VPA 53-1/2/5/6 U NODE ATTRIBUTES: CONNECT IS E1 RC AT 15

16

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EINSMANN 10/647827
                                       Page 3
DEFAULT MLEVEL IS ATOM
         IS UNS AT 19
GGCAT
DEFAULT ECLEVEL IS LIMITED
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 51
STEREO ATTRIBUTES: NONE
L2
               6 SEA FILE=REGISTRY SSS FUL L1
L3
               1 SEA FILE=HCAPLUS ABB=ON L2
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     ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
L3
AN
     2005:181779 HCAPLUS
DN
     142:263069
ED.
     Entered STN: 04 Mar 2005
TI
     Ethylenically-unsaturated blue anthraquinone dyes
IN
     Pearson, Jason Clay; Weaver, Max Allen; Fleischer, Jean Carroll; King,
     Greq Alan
PΑ
     USA
SO
     U.S. Pat. Appl. Publ., 13 pp.
     CODEN: USXXCO
DT
     Patent .
LΑ
     English
IC
     ICM C09B001-00
INCL 008643000
     41-4 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic
     Sensitizers)
     Section cross-reference(s): 37
FAN.CNT 1
     PATENT NO.
                            KIND
                                  DATE
                                                 APPLICATION NO.
                                                                            DATE
PI
     US 2005044644
                            A1
                                    20050303
                                                 US 2003-647827
                                                                            20030825
                                                WO 2004-US26699
     WO 2005021663
                            A1
                                   20050310
         NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
              SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE.
              SN, TD, TG
PRAI US
        2003-647827
                             Α
                                    20030825
CLASS
                   CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
US 2005044644
                   ICM
                          C09B001-00
                   INCL
                          008643000
                          008/643.000
US 2005044644
                  NCL
                          C09B069/10B
                  ECLA
                          C09B069/10B
                  ECLA
WO 2005021663
     This invention pertains to certain novel colorant compds. containing one or
     more ethylenically-unsatd., photopolymerizable radicals that may be
     copolymd. (or cured) with ethylenically-unsatd. monomers to produce
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6/28/05 Page 4 colored compns. such as colored acrylic polymers. Suitable compns. having the present colorants copolymd. therein include, e.g., polymers produced from acrylate and methacrylate esters, colored polystyrenes, and similar colored polymeric materials derived from other ethylenically-unsatd. monomers. The present invention also pertains to processes for preparing the photopolymerizable colorant compds. The ethylenically unsatd. colorant compds. may be suitable for use in coatings that are applied to wood, glass, metal, thermoplastics and the like. Thus, heating 2.03 g 1,5-dihydroxy-8-nitro-4-[(3'-hydroxymethyl)anilino]anthraquinone with 1.06 g 3-isopropenyl-α,α-dimethylbenzyl isocyanate in 35 mL toluene in the presence of 4 drops dibutyltin dilaurate with stirring at 90° for 2.5 h gave a dye. polymerizable anthraquinone dye manuf colored acrylic polymer Epoxy resins, preparation RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic; manufacture of ethylenically-unsatd. blue anthraquinone dyes useful for colored acrylic polymers) Coating materials Dyes (manufacture of ethylenically-unsatd. blue anthraquinone dyes useful for

IT 845858-61-9P 845858-62-0P

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IT

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of ethylenically-unsatd. blue anthraguinone dyes useful for colored acrylic polymers)

845858-57-3P 845858-58-4P 845858-59-5P TT 845858-60-8P

colored acrylic polymers)

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of ethylenically-unsatd. blue anthraquinone dyes useful for colored acrylic polymers)

IT 760-93-0, Methacrylic anhydride 2094-99-7, 3-Isopropenyl- α , α dimethylbenzyl isocyanate 3263-46-5. 3263-48-7 15791-78-3 RL: RCT (Reactant); RACT (Reactant or reagent)

> (manufacture of ethylenically-unsatd. blue anthraquinone dyes useful for colored acrylic polymers)

тт 845858-61-9P 845858-62-0P

> RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of ethylenically-unsatd. blue anthraquinone dyes useful for colored acrylic polymers)

RN845858-61-9 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3propanediyl ester, polymer with 2-[4-[(9,10-dihydro-4,5-dihydroxy-8-nitro-9,10-dioxo-1-anthracenyl)amino]phenyl]ethyl [1-methyl-1-[3-(1methylethenyl)phenyl]ethyl]carbamate, Jagalux UV 1500, (1-methylethylidene)di-4,1-phenylene di-2-propenoate and oxybis(methyl-2,1-ethanediyl) di-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 845858-59-5 CMF C35 H31 N3 O8

PAGE 1-A

PAGE 2-A

CM 2

CRN 397330-79-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 57472-68-1

EINSMANN 10/647827 6/28/05 Page 6

> CMF C12 H18 O5

CCI IDS

$$\begin{array}{c} 0 & 0 & 0 \\ || & || & || \\ \text{H}_2\text{C} = \text{CH} - \text{C} - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} = \text{CH}_2 \\ \end{array}$$

2 (D1-Me)

CM

CRN 15625-89-5 CMF C15 H20 O6

CM 5

CRN 4491-03-6 CMF C21 H20 O4

RN 845858-62-0 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[4-[(4,5-dihydroxy-9,10-dihydro-8-nitro-CN 9,10-dioxo-1-anthracenyl)amino]phenyl]ethyl ester, polymer with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, Jagalux UV 1500, (1-methylethylidene)di-4,1-phenylene di-2-propenoate and oxybis(methyl-2,1-ethanediyl) di-2-propenoate (9CI) (CA INDEX NAME)

CM

845858-60-8 CRN CMF C26 H20 N2 O8

CM 2

CRN 397330-79-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 57472-68-1 CMF C12 H18 O5 CCI IDS

$$\begin{array}{c} {\rm O} & {\rm O} \\ || & || \\ {\rm H}_2{\rm C} = {\rm CH} - {\rm C} - {\rm O} - {\rm CH}_2 - {\rm CH}_2 - {\rm O} - {\rm CH}_2 - {\rm CH}_2 - {\rm O} - {\rm C} - {\rm CH} = {\rm CH}_2 \\ \end{array}$$

CM 4

CRN 15625-89-5 CMF C15 H20 O6

CM 5

CRN 4491-03-6 CMF C21 H20 O4

IT 845858-57-3P 845858-58-4P 845858-59-5P 845858-60-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of ethylenically-unsatd. blue anthraquinone dyes useful for colored acrylic polymers)

RN 845858-57-3 HCAPLUS

CN Carbamic acid, [1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]-, [3-[(9,10-dihydro-4,8-dihydroxy-5-nitro-9,10-dioxo-1-anthracenyl)amino]phenyl]methyl ester (9CI) (CA INDEX NAME)

RN 845858-58-4 HCAPLUS

CN Carbamic acid, [1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]-, 1-[3-[(9,10-dihydro-4,5-dihydroxy-8-nitro-9,10-dioxo-1-anthracenyl)amino]phenyl]ethyl ester (9CI) (CA INDEX NAME)

RN 845858-59-5 HCAPLUS

CN Carbamic acid, [1-methyl-1-[3-(1-methylethenyl)phenyl]ethyl]-, 2-[4-[(9,10-dihydro-4,5-dihydroxy-8-nitro-9,10-dioxo-1-anthracenyl)amino]phenyl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 845858-60-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[4-[(9,10-dihydro-4,5-dihydroxy-8-nitro-9,10-dioxo-1-anthracenyl)amino]phenyl]ethyl ester (9CI) (CA INDEX NAME)